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**Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/402,750 10/12/99 DUNLOP

P INN004

MMC1/0801

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EXAMINER

LEJA, R

ART UNIT

PAPER NUMBER

2836

DATE MAILED:

08/01/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/402,750

Applicant(s)

Dunlop et al.

Examiner

Ronald W. Leja

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Oct 12, 1999.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-28 is/are pending in the application.
- 4a) Of the above, claim(s) 1-7, 9, and 28 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21-27 is/are allowed.
- 6) ☒ Claim(s) 10-20 is/are rejected.
- 7) ☒ Claim(s) 9 and 28 is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3
- 18) ☒ Interview Summary (PTO-413) Paper No(s). 5
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

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1. Restriction is required under 35 U.S.C. 121 and 372.

\*\*\* NOTE: Claims 9 and 28 fail to further limit the limitations of the inventions found in Claims 1 and 5, respectively. As such, the following Restriction Requirement / (Lack of Unity) is proper since it is not being based upon improper dependent claims. \*\*\*

This Application contains the following Inventions or Groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, Applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 10-27, drawn to "a banknote validator", Class 382/135.

Group II , claim(s) 1-7, 9 and 28, drawn to "a magnetic sensor", Class 324/207.

2. The Inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Group I, (Combination), drawn to a banknote validator do not require the details of a magnetic sensor for patentability. Group II, (Subcombination), drawn to a magnetic sensor, can be utilized for many different applications, such as fault protection wherein a magnetic sensor is required to determine when the fault condition arises.

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3. During a telephone conversation with Susan Luna on 7/25/01 a provisional election was made with traverse to prosecute the invention of Group I, claims 10-27. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-7, 9 and 28 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

5. Claims 9 and 28 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 9 and 28 do not further limit a limitation found in the respective Independent claim, but rather in a sense, try to add "intended use" for the invention of the Independent claims.

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 10, 11, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Uchida et al. (4,881,268).

Uchida et al. disclose in Fig.s 1, 2 & 7, a banknote validator wherein a light source (9,15) directs light into a light guide (3,112) at an oblique angle and wherein after reflecting from a banknote, optical filters (8A-C, 115R,B) permit only particular wavelengths to filter therethrough to a photodetector (10A-C, 11, 116a,b).

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 12 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida et al..

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Claim 12 adds that the light guide is substantially in the shape of a trapezoid. Uchida et al. do not disclose this particular shape, however, such a limitation would have been obvious as a mere engineering design choice. The light guide is utilized for directing both the incident and reflected waves and the shape of Uchida et al. allows for this with the additional feature of offering the connections for the fiber optic cables to be at a location which avoids their interfering with movement operations of the banknote. The particular shape chosen for a light guide would depend upon the overall design, space constraints determined by the other components and system and maximizing sensing of the banknote. Claim 16 adds that the reflected light should be oblique to the banknote. Uchida et al., in Fig.s 2 and 7, appear to disclose that the reflected light is at right angles to the banknote. Again such limitations of right-angles or oblique-angles or between 60-80 degrees or at 70 degrees, would have been obvious limitations as mere matters of engineering design choice and determined with the same reasons proffered above. The angle of reflection is not as critical as utilizing the appropriate filter (i.e. wavelengths -- Claim 15) for the anticipated banknotes being validated; limitations drawn to such issues would have been obvious as a means to validated the appropriate banknotes, for example, the banknotes of a particular country.

10. Claims 21-27 are allowed. It is known, such as taught in Gorgone et al. (4,513,439), to utilize a non-return gate and forward as well as reversible driving means, but not to reverse drive an accepted banknote after it has cleared the non-return gate.

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Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Ronald W. Leja whose telephone number is (703)308-2008.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)308-0956. The Group FAX numbers are (703)305-3431 or (703)305-3432.

*Ronald W. Leja*  
RONALD W. LEJA  
PRIMARY EXAMINER

*7/30/01*

rw1  
July 30, 2001